REMARKS

Claims 1-30 remain pending in this application.

Claims 7, 12, and 26, have been amended to correct certain informalities therein and are not made for purposes of patentability. These amendments are not presented to overcome any rejection or to distinguish the claim over the prior art.

The Examiner rejected claims 1, 2, 3, 7, 8, 11, 12, 15, 16, 20, 21, 22, 26, 27, and 30, under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,363,204 (*Coronel*). Applicants respectfully traverse this rejection.

Applicants respectfully assert that *Coronel* does not teach, disclose, or suggest, all of the elements of claim 1 of the present invention. *Coronel* discloses a database that contains an evolution of a process parameter in normal operating conditions and in all identified deviations of the process. It also contains the history of the wafer. *Coronel* discloses a rule that is defined by process engineers, such as thirty seconds after step A started, check signal S1 amplitude and if the variation between two samples is greater than 5%, then the alert code of "IMMEDIATELY STEP STOP" would be flagged. *See*, column 13, lines 12-18. *Coronel* discloses that a construction of an alarm component of a database is provided. This refers to an alert code and a recommended action to be taken that are assigned to any identified deviation. These alarms and related data are stored in a database. *See*, column 13, lines 43-48. The Examiner utilizes this disclosure by *Coronel* to read upon the fault detection analysis being based upon data acquired from a database based upon a trigger signal. However, Applicants respectfully assert that the

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alert condition does not read upon the trigger signal called for by claims of the present invention. *Coronel* discloses storing the alarms into the database. *See,* column 14, lines 52-54. The alarm reports are stored into the database 46 in a file referred to as "wafer history." In contrast to *Coronel,* claim 1 of the present invention, which calls for performing a fault detection analysis based upon a trigger signal, wherein the fault detection analysis is based upon the data acquired from a database, which stores data on a real time or a near real time basis. These concepts are not disclosed or suggested by *Coronel.*

Coronel discloses that tests are performed *in situ* and in real time. *See,* column 14, lines 39-40. However, claim 1 calls for acquiring data on a real time basis and storing the data in a database. In contrast, *Coronel* discloses applying algorithms stored in the database to analyze the corresponding signals generated by a controller according to the analysis rule stored in the database. However, *Coronel* does not disclose a trigger signal that causes the performance of a fault detection analysis based upon data stored in the database. In fact, *Coronel* is directed to storing algorithms in databases and analyzing signals generated by the controller according to the analysis rules stored in the database. Claim 1 refers to data stored in the database and performing a fault detection based upon a trigger signal. The alert code of "IMMEDIATE STEP STOP," for example, disclosed in column 13, lines 13-18 of *Coronel,* does not read upon the trigger signal. In fact, it is quite the opposite in this portion of *Coronel,* which calls for performing an analysis of samples and determining whether there are variations between certain percentages to generate an alert code of "IMMEDIATE STEP STOP," which the Examiner relies upon to read upon portions of the claim. However, in contrast to *Coronel,* claim 1 of the present invention calls for a trigger signal that causes the performance of a fault detection analysis based upon the data in

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the database. In contrast to claim 1, *Coronel* discloses storing alert code and alarm report data into a database. Therefore, *Coronel* simply does not disclose all of the elements of claim 1 of the present invention.

Similarly, claim 12 provides for various methods that include acquiring various process data and storing it into a database and performing a fault detection based upon the data in the database based upon a trigger signal, which is also not disclosed, taught, or suggested by *Coronel* for at least the reasons described above. Furthermore, claims 15, 16, and 20, call for various apparatus and systems for performing a fault detection analysis based upon a trigger signal wherein the fault detection analysis is based upon data that is acquired on real time or a near real time and stored into a database, which are elements that are not disclosed, taught, or suggested by *Coronel* for at least the reasons described above.

Independent claims 1, 12, 15, 16, and 20, are allowable for at least the reasons cited above.   Additionally, dependent claims 2-11, 13-14, 17-19, 21-30, which depend from independent claims 1, 12, 16, and 20, respectively, are also allowable for at least the reasons cited above. Accordingly, claims 1, 2, 3, 7, 8, 11, 12, 15, 16, 20, 21, 22, 26, 27, and 30, which were rejected under *Coronel* are allowable.

Reconsideration of the present application is respectfully requested.

Applicants acknowledge and appreciate the indication from the Examiner that claims 4, 5, 6, 9, 10, 13, 14, 17, 18, 19, 23, 24, 25, 28, and 29, would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. In light of the

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arguments presented above, Applicants respectfully assert that all of the claims are allowable. In

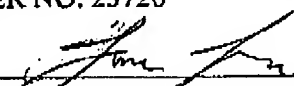light of the arguments presented above, a Notice of Allowance is respectfully solicited.

If for any reason the Examiner finds the application other than in condition for allowance,

the **Examiner is requested to call the undersigned attorney** at the Houston, Texas telephone

number (713) 934-4069 to discuss the steps necessary for placing the application in condition for

allowance.

Respectfully submitted,

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